XXIX. Description of some Hermaphrodite British Lepidoptera, with Figures of the Insects. By William Wing, Esq. (Pl. XIV. fig. 2-9.)

[Read July 3, 1848.]

Many instances have been recorded of insects that have exhibited the characters of both sexes, as well in the colours and markings on the wings and body as in the form of different parts; and as a few specimens of these among the Lepidoptera have come to my knowledge, I have thought it desirable that accurate figures and descriptions of these specimens should also be published. I have therefore drawn up short notices of their principal characters, which I now beg to lay before the Society, presenting therewith a plate of delineations of the insect.

Colias Edusa (Pl. XIV. fig. 2). In this insect the left side is that of the male, and the right side, as indicated by the size and form of the wings, is female, further distinguished by the marginal vellow spots in the anterior wing of that side.

This specimen was captured at Riddlesdown, near Croydon, Surrey, August, 1847, and is now in the possession of S. Stevens, Esq.

Anthocharis Cardamines (Pl. XIV. fig. 3). In this species the characters of the two sexes are very conspicuous. The bright orange spot on the left anterior wing strongly contrasts with the clear colour of the right wing, which also has the black spot the largest, as is always the case in the female. There is also a striking difference in the relative sizes of the wings of the two sides, the female being the largest.

This specimen was taken near London, and is now in the possession of H. Doubleday, Esq., to whom I am indebted for the loan of it, and also of the following specimen.

Smerinthus Populi (Pl. XIV, fig. 4). In this instance the left antenna, wings and side of the body are most distinctly masculine, while those of the right arc of the other sex. There is a marked longitudinal line of distinction between the two sides on the dorsal surface of the abdomen; and the colours and markings on the wings are darker and more distinct on the left side, and are those peculiar to the male, while those on the wings of the right side are as characteristic of the female; the antenna on the left side is broad and densely pectinated as in the male, while that on the right is narrow and setaceous. The abdomen of the male insect of this species, as is well known, is always smaller in diameter than in the female, and densely tufted at the anus, and this is precisely the case in that half of the specimen in question which exhibits the characters of the former sex.

This specimen was taken at Witham, in Essex.

Diaphora Mendica (Pl. XIV. fig. 5). This specimen has the form of the wings, body and antennæ of the male, but the colour and markings of the female. The male of this species, as entomologists are aware, is dark ash colour, with black spots, while the female is cream colour, with similar markings, like the specimen figured.

Taken by Mr. Nicholas Cooke, near Dublin, June, 1842.

Orgyia Antiqua (Pl. XIV. fig. 6) is an imperfectly developed hermaphrodite, which had not fully expanded the upper wing on the right side, which in this case is that of the male, as shown by the large pectinated antenna and the fully developed posterior wing; the antennæ on the left side being setaceous as in the female, and the wings also rudimentary as in that sex.

It was reared by the late Mr. Henry Longley, from the larva, and presented since his death to the British Museum.

Acronycta Aceris (Pl. XIV. fig. 7). The left side, together with the whole of the body, is distinctly of the form and colour of the male of this species, while the right wings have the colour and fainter markings of the female.

It was reared from a pupa, and kindly presented to me by E. Doubleday, Esq.

Biston Prodromaria (Pl. XIV. fig. 8). The wings and whole of the body appears to have the characters of the male, but the right antenna is that of the female; the difference of wings in the sexes of this species is scarcely to be perceived.

It was taken in Dunham Park, Cheshire, in April, 1840, by R. Edleston, Esq., to whose kindness I am indebted for the opportunity of figuring it, and also of the following insect, and *Diaphora Mendica*.

Nyssia Zonaria (Pl. XIV. fig. 9). The characters are entirely those of the female, with the exception of the antenna on the left side male; the rudiments of the wings are longer on the left side. It was taken by Mr. B. Cooke, at New Brighton, March, 1838.

XXX. Extracts from a Paper by Zeller published in the Linnæa Entomologica, vol. 3, on the "Leaf-mining Tineæ, with Eye-Caps" (Augendeckeln), with Remarks by H. T. Stainton, Esq.

## [Read July 3, 1848.]

My object being to draw attention to the different species and their habits, in order to lead to the discovery in this country of those which are still unknown to us, I shall merely quote the distinguishing characters of those species not previously described as indigenous. Zeller's paper includes the following genera: Lyonetia, Phyllocnistis, Cemiostoma, Opostega, Bucculatrix, Nepticula, Trifurcula, and Tischeria, corresponding to portions of our genera Argyromiges, Microsetia, and Aphelosctia.

In his genus Lyonetia he has four species, two of which only

are known to us.

"Sp. 1. Clerckella, Linn." Linn. Ent. vol. 3, p. 252. Vol. 2, pl. 2, f. 27—30.

This is the species described by me under this name in the Zoologist, p. 2159, and identical with the autumnella of Curtis, and the nivella and semiaurella of Stephens, which latter is the variety æreella of Treitschke.

" This species is very widely dispersed, and probably abundant

in many places, but not sufficiently observed.

"The first specimens in the year I beat from birch in the first days of May, but scarce and only the varieties. After that, Clerckella flies from June through the whole of the summer and autumn. I beat it abundantly from the wild apple and pear; but mostly from birch bushes.

"The variety æreella, not scarce in several places in Tuscany

in March, April and June (Mann)."

It appears thus, from Zeller and Mann's observations, that the variety cercella (our semiaurella) occurs in the early spring in March, April and May, but not the typical Clerckella; the same